ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.   20554

In the Matter of	)	
	)	
Implementation of	)	
Sections 12 and 19 of	)	
the Cable Television	)	MM Docket No. 92-265
Consumer Protection and	)	
Competition Act of 1992	)	
	)	
Development of Competition and	)	
Diversity in Video Programming	)	
Distribution and Carriage	)	

To: The Commission

SUPPLEMENT TO PETITION FOR RECONSIDERATION AND CLARIFICATION

Viacom International Inc. ("Viacom"), by its attorneys,
hereby submits this supplement to its Petition for
Reconsideration and Clarification filed in the above-referenced
proceeding on June 10, 1993. The supplement is filed because, as
a result of copying error, an appendix that was attached to "The
Economic Case for a De Minimis Exemption From the Commission's
Program Access Rules," which was prepared by Robert W. Crandall
and Michael L. Glassman and was itself submitted as an appendix
to Viacom's pleading, may not have been included in all copies
filed with the Commission.

Accordingly, submitted herewith, for association with
Viacom's petition, is "The Economic Case" complete with its
appendix. It should be noted that certain typographical errors
have been corrected and other non-substantive changes have been

made by the authors from the version of "The Economic Case" that accompanied the original filing to reduce the chance of misunderstanding.

Respectfully submitted,

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June 11, 1993

THE ECONOMIC CASE FOR A
DE MINIMIS EXEMPTION
FROM THE
COMMISSION'S PROGRAM ACCESS RULES

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THE ECONOMIC CASE FOR A DE MINIMIS EXEMPTION FROM THE COMMISSION'S PROGRAM ACCESS RULES

The Cable Television Consumer Protection and Competition Act of 1992 ("the Act") directed the Federal Communications Commission (the "Commission") to establish regulations designed to deter certain potentially anticompetitive practices of vertically-integrated entities (i.e., entities that own interests in both cable systems and program services) as a way of increasing competition and diversity in the programming marketplace. Viacom International Inc. ("Viacom") has proposed that a vertically-integrated program service be exempt from the so-called program access rules, if the program service's commonly-owned cable systems represent a very small percentage (fewer than 5%) of the program service's total subscribers. In this paper, we explain (and support with empirical analysis) that such a de minimis exemption is appropriate because a vertically-integrated program service which would qualify for the exemption would not have the ability or economic incentive to engage profitably in anticompetitive behavior in dealing with alternative distributors.[1] In fact, we strongly believe that the Commission can be confident that the economic incentive to engage in such behavior would not exist even at subscriber levels significantly greater than the proposed 5% level.

It is undisputed that vertical integration in the cable industry provides benefits through cost reduction, the creation

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[1] By alternative distributor, we refer to distribution technologies other than traditional cable television systems.

of new program services and improved market intelligence through, for example, market testing on commonly-owned systems. Further, regulatory costs associated with investigating and disposing of program access complaints will not be insignificant. Therefore, any rules hindering vertically-integrated competitors must be carefully drawn so as to have their intended effect without unnecessarily burdening such companies and the Commission. By adopting a de minimis exemption, the Commission will be able to conserve its scarce regulatory resources, confident that consumer welfare has not been jeopardized and that Congress' mandate has been fulfilled.

We will also show that failure to establish a de minimis exemption to the program access rules will tend to compromise other important objectives of the Act and of antitrust policy. For example, lack of such an exemption will: (1) tend to cause an increase in concentration of cable ownership, contrary to the intent of the Act, and (2) provide an impediment to entry, especially by small companies, into cable programming, contrary to the spirit of the Act and of antitrust policy.

The remainder of this paper is divided into four parts. In Section I, we provide a discussion of factors that may encourage or discourage anticompetitive behavior against alternative distributors by vertically-integrated program services. In Section II, we develop an economic model that may be used to determine whether a vertically-integrated program service with a relatively small fraction of subscribers on its owned cable

system would find it profitable to engage in anticompetitive behavior in its dealings with alternative distributors. In Section III we discuss the adverse effects on competition that are likely to be incurred in various segments of the cable industry if a <u>de</u> <u>minimis</u> exemption is not adopted. Section IV contains a brief summary of our analysis.

cable own systems. This ability is dependent upon the degree of geographical overlap in service areas of the cable systems and the alternative distributors. If an alternative distribution system services an entirely different geographical area from that served by the vertically-integrated cable system, there is no potential for attracting new subscribers to the cable system from such an alternative distributor. Therefore, in the absence of collusion, there is no benefit from engaging in anticompetitive behavior. If the overlap is small, incentives for anticompetitive behavior are also small, especially since it is not practical for a program service to charge one license fee with respect to subscribers in one geographic part of a system (where there is overlap) and another license fee with respect to subscribers in another geographic part of a system where there is no overlap.

Second, the feasibility of anticompetitive discrimination would vary with differences in distribution technologies and services. For example, if a SMATV system (an alternative distribution technology typically found in high density buildings or complexes such as urban apartment buildings) were denied access to a particular program service, consumers in that building would, in most cases, not have the ability to subscribe
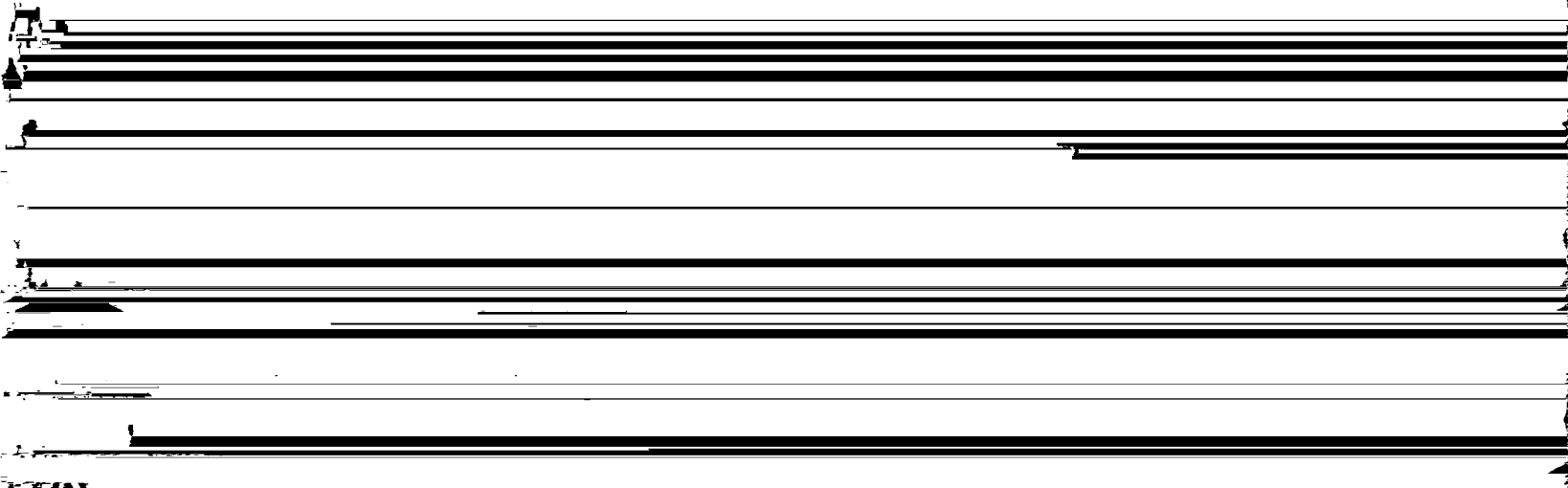
from anticompetitive behavior against SMATV operators. By way of further example, consider TVRO distribution, a technology typically used in rural areas. A large percentage of subscribers choose this technology because cable service is not available in their area. Thus, few new subscribers to cable could result from anticompetitive behavior against TVRO distributors. As a result, it would generally make little economic sense for a vertically-integrated program service to discriminate against a TVRO distributor which has only limited overlap with the program service's own cable systems. Too much revenue would be lost to non-owned distribution systems, and too little revenue would be captured by the program service's own cable systems.

A third set of factors that influence the profitability of anticompetitive behavior toward alternative distribution systems is related to the nature of programming. For example, if a vertically-integrated program service faces substantial competition, the elasticity of demand for its service will be high, so that subscribers are unlikely to switch from an alternative distribution system to a cable system just because the alternative distribution system is denied access to the particular program service. Given the intense competition among program services with similar characteristics, a small price increase for such a service or the denial of such a service to any given distribution medium would induce consumers to switch to another service on the same system rather than switch to another distribution medium. Similarly, if the program service is very

specialized, it is likely to be attractive to only a small number of subscribers on any particular distribution system, and therefore it is unlikely for subscribers to switch in sufficient numbers to make discrimination profitable.

Programming that involves the payment of large rights fees is also a poor candidate for anticompetitive pricing or denial of availability. For example, premium services such as HBO and Showtime that exhibit recently-released movies pay very substantial rights fees to movie studios and others when acquiring product. As a result, profitability is extremely sensitive to and dependent upon the number of subscribers to the particular program service. Smaller vertically-integrated program services are therefore unlikely to discriminate against alternative distributors especially if such behavior creates a

it demonstrates, in a simple and easily calculable manner, that at the low levels of vertical integration proposed in the 5% standard, there is simply no economic incentive for a vertically-integrated program service to engage in anticompetitive behavior.

II.   A Simple Model of Profitable Discrimination and a Standard for Exemptions

For a vertically-integrated program service to benefit from discrimination against non-cable distribution media, it must gain more from subscribers shifted to its cable systems than it loses in revenues foregone from the other distribution media. Therefore, the profitability of such discrimination turns on the network's ability to shift subscribers to its cable systems and the relative profitability of cable television versus cable network programming. Our model demonstrates that it is unprofitable for a program service whose commonly-owned cable systems account for fewer than five percent of the total subscribers to the service to deny alternative distributors access to that service.

The profitability of discrimination turns on the importance of the vertically-integrated firm's program service(s) to a subscriber's decision to switch from one technology to another, the size of the firm's cable system subscriber base and the relative profitability of commonly-owned cable systems to program services. Our analysis demonstrates that cable ownership far in excess of that contemplated by Viacom's proposal is needed to

make discrimination profitable even if the firm owns a number of networks that are important to subscribers.

There are few studies of the sensitivity of cable subscription to the number of available program networks (i.e., the importance of a program service to a consumer's decision to subscribe to a particular distributor). A recent study suggests that, in general, an increase in the number of cable networks increases cable penetration by 0.6 times that increase.[2] Thus, if the number of cable networks increases by 5 percent -- say, from 20 to 21 -- the number of subscribers would increase by 3 percent. The number of cable networks is very large. Paul Kagan Associates lists 28 "major" basic cable networks and seven national premium networks, but there are many more national and regional networks, particularly regional sports networks. Thus the denial of any one program service or group of program services to a non-cable distributor is unlikely to cause very many viewers to shift from the non-cable distributor to a cable system with access to that programming.

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[2] Robert W. Crandall, "Elasticity of Demand for Cable Service and the Effect of Broadcast Signals on Cable Prices," Report prepared for TCI in Mass Media Docket 90-4. See also J. W. Mayo and Y. Otsuke, "Demand, Pricing and Regulation: Evidence from the Cable Television Industry," The RAND Journal of Economics, Autumn 1991, pp. 396-410. Of course, the percentage may change to some extent depending on the popularity of a particular service.

In the analysis that follows, we assume the ultimate form of discrimination -- denial of the program service.[3] We also assume[4] that the _incremental_ profit from cable television service per subscriber is $193 per year, the incremental profit per subscriber for premium cable networks is $58 per year and the incremental profit per basic-cable subscriber is $3.30 per year. In the table that follows, we show the effect of different assumptions concerning the relative size of the integrated network's share of downstream cable subscribers.

We provide calculations of the profitability of discrimination under the assumption that denial of an integrated network's program service could shift 10 percent, 20 percent, 30 percent, or 50 percent of subscribers, even though it is unlikely that any integrated network controls sufficient programming to

assumption that the integrated firm owns cable systems that reach

5 percent, 10 percent, 25 percent, 50 percent, 75 percent, and

100 percent of households in the alternative distributor's

market.

TABLE 1[6]

Potential Discriminatory Profit
Per Dollar of Non-cable Programming Revenue Lost

Share of Cable Subscribers Controlled By Integrated Network	Share of Noncable Shifted to Cable			
	10%	20%	30%	50%
5%	-$0.96	-$0.92	-$0.89	-$0.81
10%	-$0.92	-$0.85	-$0.77	-$0.62
25%	-$0.81	-$0.62	-$0.43	-$0.05
50%	-$0.62	-$0.24	$0.14	$0.90
75%	-$0.43	$0.14	$0.71	$1.85
100%	-$0.24	$0.52	$1.28	$2.80

Note: Assumes one premium network plus three basic networks.

The calculations in Table 1 are based on an integrated

network with one premium service that attracts one-third of

subscribers on either a cable or non-cable distribution system at

a net profit of $58 per subscriber per year to the network plus

three basic networks that net $9.90 per subscriber per year in

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[6]Calculations in Table 1 reflect gains and losses from
sacrificing $1.00 of network revenues on the non-cable medium.
For instance, the $.89 loss referred to in the text reflects an
$.11 gain in profit on the network's cable systems less $1.00

incremental profit. The results in Table 1 show that discrimination cannot be profitable when the level of commonly-owned cable systems is at the level proposed by Viacom.

It is clear from these results that no integrated program service whose commonly-owned cable systems account for fewer than 5 percent of the total subscribers to that service could profitably discriminate against national non-cable media such as TVRO distributors or potential DBS systems. If such a service, for example, shifted 30 percent of subscribers to cable, it would suffer a net loss of $.89 for every dollar shifted from the non-cable medium, according to Table 1. In the case of denial of the program services to all MMDS with approximately 320,000 subscribers nationwide, the program services' revenues would drop by about $9.4 million but incremental profit to the cable system would increase by more than $1 million. Thus, by discriminating against MMDS, the vertically-integrated programmer would end up reducing its profit by about $8.3 million.

Even if the network could shift all of these non-cable media's subscribers to cable -- obviously an extreme assumption given the availability of broadcast stations, superstations and other cable programming -- the vertically-integrated program service would have to control systems with more than 13 percent of all of the country's cable households. This is far in excess of the level of subscribers permitted under Viacom's proposal.

In some media, such as SMATV or TVRO, it is extremely difficult to induce a particular subscriber to switch since that

subscriber generally does not have the ability to gain access to cable. Even looking at the regional or metropolitan-area level, the possibility for profitable discrimination is limited. It is, however, conceivable that a vertically-integrated service could structure its prices to discriminate against a medium such as MMDS, which is typically confined to a given metropolitan area, if the program service's commonly-owned cable systems covered a very large share of the MMDS system's potential market. However, a cable operator service with a small share of national cable households obviously cannot have a large share of cable homes in many metropolitan areas.

For instance, Viacom cable systems are in several markets scattered across the United States. In the Northern California and Nashville markets in which it has a large presence, Viacom cable has the average potential to reach only about 31 percent of DMA households. Assuming that most MMDS systems cover the entire DMA,[7] Viacom would fail to recover about 29 cents of every dollar of MMDS network revenues lost even if its programming were so attractive as to allow it to shift 30 percent of MMDS subscribers to cable through discrimination.

In short, a program service whose commonly-owned cable systems account for fewer than 5 percent of the total subscribers to that program service is simply too reliant on non-cable

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[7]   We have no information on MMDS coverage. It is our understanding that many MMDS systems have the potential to cover an entire metropolitan area.

subscribership to engage in profitable discrimination against non-cable distribution media. Establishing a <u>de minimis</u> exemption from the program access rules for networks whose commonly-owned cable systems account for fewer than 5 percent of the subscriber base of that network would pose no threat to competition.

III. Other Negative Effects of the Lack of a De-Minimis

with low levels of integration. Furthermore, if regulatory costs
incurred by a program service with _de minimis_ vertical
integration begin to significantly cut into its profits, this
program service would be forced to consider divestiture of its
cable systems since: (1) all program service license fees
payable to vertically-integrated program services would be
subject to regulatory scrutiny, (2) fixed regulatory costs are
likely to be substantial relative to cable system profits where
the level of cable system ownership is small, (3) substantial
regulatory costs could be avoided through divestiture, and
(4) higher returns would be available through redeployment of the
proceeds derived from such divestitures to alternative
investments.   The most likely purchasers of the divested cable
systems would be the large cable MSOs (to the extent that such
entities would be permitted to expand) which would be in a more
advantageous position (on a cost-per-subscriber basis) to absorb
the new regulatory costs. Presumably, the Commission and
Congress would not be favorably disposed to further increases in
the concentration of cable system ownership. Indeed, if
concentration rose, the incentives and ability to engage in

interest would be served by increasing the threat of
anticompetitive behavior without obtaining any benefits from
deterring such behavior.

Second, the lack of a de minimis exemption would tend to
erect barriers to entry into the production of program services.

product allowing the producer/owner to closely monitor the market, assess consumer responses to its programming and experiment with alternative formats, scheduling differences and the like. This integration reduces the risks inherent in the creation of new programming, thereby increasing the probability of success in an otherwise high-risk endeavor. Non-integrated new-entrant programmers would be denied these efficiency-promoting and risk-reducing relationships unless they were willing to accept potentially severe regulatory restraints.
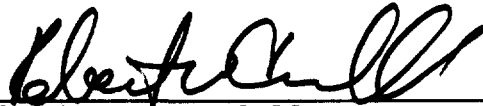
IV. CONCLUSION

We support Viacom's proposed de minimis exemption to the program access rules of the Act for any program service that is under common ownership with cable systems that account for fewer than five percent of the subscribers to the program service. Our research suggests that failure to provide relief for vertically-integrated program services that fall below the five percent threshold portends serious potential economic consequences. Adverse effects of the failure to adopt a de minimis exemption include:

1. Excessive costs of regulation in both the public and private sectors.

2. Increased costs of providing programming and program services.

3. Increased concentration of cable ownership.

4. Reduced entry into programming and greater risks associated with attempting entry.
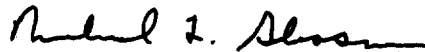
Our economic analysis suggests that the Commission confine its enforcement to areas where there are potential benefits from enforcement and forego enforcement where no credible competitive threat exists. It would be unfortunate if regulation of behavior of vertically-integrated program services increased rather than reduced costs to American consumers.

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APPENDIX

The model in Section II is derived from optimizing conditions for a vertically-integrated program network. Specifically, it is assumed that the network will not sell its programming to noncable media -- _i.e._, it will discriminate against such media totally -- if the loss in profits from such media is offset by the gain in profits on the network's own cable system:

(1)
$$- \Delta\Pi_p \prec \Delta\Pi_c$$

where $- \Delta\Pi_p$ is the value of lost network profits from refusing to sell its programming services to noncable outlets and $\Delta\Pi_c$ is the value of changes in network profits from diverting subscribers from the noncable media to its cable systems.

The profits lost from discriminating against the noncable media may be written as:

(2)
$$- \Delta\Pi_p = - m * a * \Pi_p * H$$

where H is the number of households in the non-cable medium's area(s) of operation, $\underline{m}$ is the share of these households that subscribe to this noncable outlet, $\underline{a}$ is the share of these subscribers that would be reached by the integrated network's programming, and Π_p is the incremental profit per subscriber to

- 1 -

the integrated program network from selling this network service
through this noncable medium. If the network in question is a
basic network $\underline{a}$ is equal to one since every subscriber to the
noncable medium would receive it. If, however, the program
network is a premium service, $\underline{a}$ would represent the share of
subscribers electing to take the premium network channel.

The profits gained from discrimination may be written as:

(3)

$$\Delta\Pi_c = \left[c*\Pi_c + c*a\Pi_p \right] * H$$

where c is the share of the H households that the integrated
network attracts to its commonly-owned cable systems by refusing
to offer its cable networks to the noncable medium and Π_c is the
incremental profit per subscriber to its <u>cable systems</u>.

Setting (2) equal to (3) and manipulating the results
provides the following condition for successful discrimination:

(4)
$$\frac{\Pi_c}{\Pi_p} > \frac{a(m-c)}{c}$$

Not surprisingly, profitable discrimination rises with the
marginal profit per cable subscriber (Π_c), but falls with the
marginal profit per network subscriber on alternate (and cable)
media Π_p. Moreover, the profitability of discrimination

increases with c/m, the share of the alternate medium's subscribers attracted to the network's cable systems. A more convenient way of expressing (4) is:

(4')

$$\frac{c}{m} \left[\frac{\Pi_c + a\Pi_p}{a\Pi_p} \right] > 1$$

This says that profitability of discrimination requires that the profits on the integrated network's cable system per dollar of profit lost through discrimination must be more than one.

To calibrate (4'), we need information on c/m, a, Π_c, and Π_p. For basic networks, a is equal to unity, but for premium networks the data exhibit substantial variance. The market penetration for the three major premium channels, HBO, Showtime, and Disney, ranges from 17.2 percent to 41.9 percent.[1] We use one-third as the "typical" value of a for premium service. We calculate that cable systems' incremental profit per subscriber, Π_c is equal to 55.5 percent of average revenue per subscriber. This assumes that cable systems face an average price elasticity of demand of

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[1] Paul Kagan Associates, The Pay TV Newsletter, January 31, 1993.

-1.8.   Given average revenues per subscriber of $340 per year in 1992, Π_c is estimated to be equal to 193.[2]

Finally, the incremental profitability of cable networks is assumed to be equal to the average <u>revenue</u> per subscriber because incremental program revenues from subscribers in each medium flow through to profits unless the cable network's programming